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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,655	11/04/2003	Hideaki Sugiya	1075.1236	5384

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EXAMINER

HUGHES, DEANDRA M

ART UNIT	PAPER NUMBER
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3663

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/699,655	Applicant(s) SUGIYA, HIDEAKI	
	Examiner Deandra M. Hughes	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 2,15 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 2 and 15-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Inventions II-IV, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/30/2005.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 3-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Jones (US 2004/0052526 filed Sept. 16, 2002).

**The references made herein are done so for the convenience of the applicant. They are in no way intended to be limiting. The prior art should be considered in its entirety.

With regard to claim 1, Jones discloses an optical amplifier comprising:

- an amplification medium (fig. 5, RA or A1 or A2) *for amplifying wavelength-division-multiplexed (WDM) light* (this is a WDM system; paragraph [0007]);

- a measurement part (fig. 3; paragraph [0064]) *for measuring either input optical power of said WDM light on an input side of said amplification medium or output optical power of said WDM light on an output side of said amplification medium, or both of them (fig. 3 discloses both input and output measurements)*;
- a variable gain equalizer (fig. 5, DGE) connected on a transmission line and *capable of variably setting a passing-wavelength characteristic (paragraph [0016])*;
- a database (paragraph [0041]) *for holding at least data representing wavelength characteristics that respectively correspond to transmission line types (the Q estimator requires fiber parameters)*;
- an arithmetic part (fig. 5, 53-1) *for computing an inverted passing-wavelength characteristic resulting from a passing-wavelength characteristic of said variable gain equalizer (paragraph [0116]), based on an acquired transmission line type, said optical power measured by said measurement part, and said data held in said database (paragraph [0081])*;
- and a setting part (fig. 5, #121) *for setting a passing-wavelength characteristic of said variable gain equalizer, based on said inverted passing-wavelength characteristic computed by said arithmetic part (paragraph [0094])*.

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With regard to claims 3 and 9, the database holds a wavelength characteristic corresponding to the measured power of the excitation light (paragraph [0069]).

With regard to claim 4, fiber length is a fiber parameter (paragraph [0041]).

With regard to claims 5-7, 10, and 13-14, channel count is a parameter used to compute the DGE passing wavelength characteristic (paragraph [0058]).

With regard to claims 11-12, the setting part sets the passing wavelength characteristics after the gain equalizer has been booted (fig. 9, #210).

With regard to claim 8, the device monitoring system monitors the status of the transmission (paragraph [0069]).

Information Disclosure Statement

4. The information disclosure statement (IDS) filed on 11/4/03 has been considered by the examiner.

Specification

5. The title of the invention is too long. A new title is required that is clearly indicative of the invention to which the claims are directed. The Examiner suggests the following title: *Optical Amplifier with Variable Gain Equalization*.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wu, Dietz, Gavrilovic, Haggans, Izumi, Kelkar, Michishita, Onaka '726, Onaka '526, Wu, and Xu disclose optical amplifiers with dynamic gain equalizers. Ye discloses optical network equipment with triggered data storage.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deandra M. Hughes whose telephone number is 571-272-6982. The examiner can normally be reached on M-F, 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Deandra M Hughes
Examiner
Art Unit 3663